

WHAT IS CLAIMED IS:

1. A remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus, comprising:

- 5           a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said information; and

            an information collection unit configured to collect, based on said information presently received, related information from all of said plurality of apparatuses included

- 10       in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled.

2. The remote control system according to claim 1, further comprising:

            an information processing unit configured to process said information which is

- 15       acquired from said plurality of apparatuses and is collected by said information collection unit; and

            an information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by

- 20       said information processing unit;

3. The remote control system according to claim 1, further comprising:

            an information setting unit configured to set in advance said information, for which said collection process by said information collection unit is allowed.

4. The remote control system according to claim 1, wherein said information

collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection unit is related to pre-maintenance.

5. The remote control system according to claim 1, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said  
5 information collection unit is related to expendable supplies and material.

6. The remote control system according to claim 1, further comprising:  
a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

7. The remote control system according to claim 2, further comprising:  
10 an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit.

8. The remote control system according to claim 2, further comprising:  
an information destination setting unit configured to set a destination of information transmission performed by said information transmission unit.

9. The remote control system according to claim 2, further comprising:  
15 an information outputting unit configured to output said information processed by said information processing unit through at least one of, image formation on a display device, data recording on a paper sheet, or audible voice.

10. The remote control system according to claim 2, further comprising:  
20 an information transmitting unit configured to transmit said information processed by said information processing unit, in case when a request for acquiring said processed information is received from any one of the terminal units.

11. A remote control system configured to control a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming

apparatus, comprising:

a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and remotely control said plurality of apparatuses based on said information;

- 5 information accumulation unit configured to accumulate information, in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled; and

information retrieval unit configured to retrieve, based on said information presently received, related information from all of said plurality of apparatuses included

- 10 in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses.

12. The remote control system according to claim 11, further comprising:

information processing unit configured to process said information which is

- 15 acquired from said plurality of apparatuses and being retrieved by said information retrieval unit; and

information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said

- 20 information processing unit.

13. The remote control system according to claim 11, further comprising:

information setting unit configured to set in advance said information, for which said retrieval process by said information retrieval unit is allowed.

14. The remote control system according to claim 11, wherein said

information which is acquired from said plurality of apparatuses and being retrieved by said information retrieval unit is related to pre-maintenance.

15. The remote control system according to claim 11, wherein said information accumulated, from all of said plurality of apparatuses to be remotely  
5 controlled, by said information accumulation unit is related to expendable supplies and material.

16. The remote control system according to claim 11, further comprising:  
a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

10 17. The remote control system according to claim 16, further comprising:  
a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system,  
wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to said communication adapters.

15 18. The remote control system according to claim 16,  
further comprising:  
a plurality of communication adapters connected to said plurality of image forming apparatuses for communicating with said central control system,  
wherein said group setting unit divides said plurality of image forming  
20 apparatuses into a number of groups each assigned to a predetermined number of said respective communication adapters.

19. The remote control system according to claim 16, wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and

wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to an IP address in said network system.

20. The remote control system according to claim 16,

5 wherein said plurality of image forming apparatuses are interconnected by way of communication networks incorporating a network control unit, and

wherein said group setting unit divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of IP addresses in said network system.

10 21. The remote control system according to claim 12, further comprising:  
information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit.

22. The remote control system according to claim 12, further comprising:  
information destination unit configured to set a destination of information  
15 transmission performed by said information transmission unit.

23. The remote control system according to claim 12, further comprising:  
information outputting unit configured to output said information processed by said information processing unit through at least one of, image formation on a display device, data recording on a paper sheet or audible voice.

20 24. The remote control system according to claim 12, further comprising:  
information transmitting unit configured to transmit said information processed by said information processing unit, in case where a request for acquiring said processed information is received from any one of the terminal units.

25. A remote control system configured to control a plurality of apparatuses

divided into a predetermined number of groups, including at least an image forming apparatus, comprising:

a central control system comprising at least a computer unit configured to receive information from said plurality of apparatuses and for remotely controlling said

5 plurality of apparatuses based on said information;

an information collection unit configured to collect, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system

10 from any one of said plurality of apparatuses to be remotely controlled;

a first information processing unit configured to process said information received from any one of said plurality of apparatuses;

a first information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of

15 image forming apparatuses, and subsequently transmitting said information processed by said information processing unit;

an information accumulation unit configured to accumulate information, in case when said information is received from any one of said plurality of apparatuses to be remotely controlled;

20 an information retrieval unit configured to retrieve, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses;

a second information processing unit configured to process said information received from any one of said plurality of apparatuses and retrieved by said information retrieval unit;

a second information transmission unit configured to transmissively connect to  
5 the terminal units so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit; and

an information decision unit configured to determine whether or not an execution command is send to any one of processing steps, said information collection  
10 unit, said first information processing unit, said first information transmission unit, said information retrieval unit, said second information processing unit, and said second information transmission unit.

26. A method for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus,  
15 comprising the step of:

receiving information relayed to a central control system from said plurality of apparatuses;

controlling remotely said plurality of apparatuses based on said information;

collecting information related to pre-maintenance and to expendable supplies  
20 and material from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received from any one of said plurality of apparatuses;

processing received and collected information by information processing

means;

transmissively connecting to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses; and

transmitting said information processed by said information processing means.

5 27. The method according to claim 26, further comprising the step of:  
providing alteration and addition onto said information processed by said information processing means.

28. The method according to claim 26, further comprising the step of:

outputting said information processed by said information processing means

10 through the means of at least one of image formation on a display device, data recording on a paper sheet or audible voice.

29. The method according to claim 26, further comprising the step of:

transmitting said information processed by said information processing means,

in case when a request for acquiring said processed information is received from any

15 one of the terminal units.

30. A method for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus, comprising the steps of:

20 receiving information relayed to a central control system from said plurality of apparatuses; and

controlling remotely said plurality of apparatuses based on said information;

accumulating information in a memory unit, in case when said information related to pre-maintenance and to expendable supplies and material is received from any one of said plurality of apparatuses;



retrieving related information from said memory unit, based on said information presently received, from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted; processing received and retrieved information;

- 5 transmissively connecting to the terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses; and transmitting said information processed by said information processing means.

31. The method according to claim 30, further comprising the step of: performing alteration and addition onto said information processed by said information processing means.

32. The method according to claim 30, further comprising the step of: outputting said information processed by said information processing means through the means of at least one of, image formation on a display device, data recording on a paper sheet or audible voice.

- 15 33. The method according to claim 30, further comprising the step of: transmitting said information processed by said information processing means, in case when a request for acquiring said processed information is received from any one of the terminal units.

34. A central control system configured to control a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus, based on information received by said central control system from said plurality of apparatuses, said central control system being included in a remote control system, comprising:

an information collection unit configured to collect, based on said information

presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control system from any one of said

5 plurality of apparatuses to be remotely controlled.

35. The central control system according to claim 34, further comprising:

an information processing unit configured to process said information which is acquired from said plurality of apparatuses and is collected by said information collection unit; and

10 an information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said information processing unit;

36. The central control system according to claim 34, further comprising:

15 an information setting unit configured to set in advance said information, for which said collection process by said information collection unit is allowed.

37. The central control system according to claim 34, further comprising:

a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

20 38. The central control system according to claim 35, further comprising:

an information alteration and addition unit configured to perform alteration and addition onto said information processed by said information processing unit.

39. The central control system according to claim 35, further comprising:

an information destination setting unit configured to set a destination of

information transmission performed by said information transmission unit.

40. The central control system according to claim 35, further comprising:  
an information outputting unit configured to output said information processed  
by said information processing unit through at least one of, image formation on a  
5 display device, recording data on a paper sheet or audible voice.

41. The central control system according to claim 35, further comprising:  
an information transmitting unit configured to transmit said information  
processed by said information processing unit, in case when a request for acquiring said  
processed information is received from any one of the terminal units.

- 10 42. The central control system according to claim 35, further comprising:  
an information outputting unit configured to output said information processed  
by said information processing unit through at least one of, image formation on a  
display device, recording data on a paper sheet or audible voice.

43. A central control system configured to control a plurality of apparatuses  
15 divided into a predetermined number of groups, including at least an image forming  
apparatus, based on information received by said central control system from said  
plurality of apparatuses, said central system being included in a remote control system,  
comprising:

- an information accumulation unit configured to accumulate information, in  
20 case when said information is received by said central control system from any one of  
said plurality of apparatuses to be remotely controlled; and

an information retrieval unit configured to retrieve, based on said information  
presently received, related information from all of said plurality of apparatuses included  
in all the groups other than the one from which said information is originally

transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control system from any one of said plurality of apparatuses.

44. The central control system according to claim 43, further comprising:  
5 an information processing unit configured to process said information which is acquired from said plurality of apparatuses and is retrieved by said information retrieval unit; and

an information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of  
10 image forming apparatuses, and subsequently transmitting said information processed by said information processing unit;

45. The central control system according to claim 43, further comprising:  
an information setting unit configured to set in advance said information, for which said retrieval process by said information retrieval unit is allowed.

15 46. The central control system according to claim 43, further comprising:  
a group setting unit configured to set a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

47. The central control system according to claim 44, further comprising:  
an information alteration and addition unit configured to perform alteration and  
20 addition onto said information processed by said information processing unit.

48. The central control system according to claim 44, further comprising:  
an information destination setting unit configured to set a destination of information transmission performed by said information transmission unit.

49. The central control system according to claim 44, further comprising:

an information transmitting unit configured to transmit said information processed by said information processing unit, in case when a request for acquiring said processed information is received from any one of the terminal units.

50. A central control system configured to control a plurality of apparatuses
- 5 divided in a predetermined number of groups, including at least an image forming apparatus, based on information received by said central control system from said plurality of apparatuses, said central control system being included in a remote control system, comprising:

- an information collection unit configured to collect, based on said information
- 10 presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control system from any one of said plurality of apparatuses to be remotely controlled;

- 15 a first information processing unit configured to process said information received from any one of said plurality of apparatuses;

- a first information transmission unit configured to transmissively connect to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, and subsequently transmit said information processed by
- 20 said information processing unit;

an information accumulation unit configured to accumulate information, in case when said information is received from any one of said plurality of apparatuses to be remotely controlled;

an information retrieval unit configured to retrieve, based on said information

presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses;

- 5 a second information processing unit configured to process said information from any one of said plurality of apparatuses and retrieved by said information retrieval unit;

a second information transmission unit configured to transmissively connect to the terminal units so as to control said plurality of image forming apparatuses, and

- 10 subsequently transmit said information processed by said information processing unit; and

a decision unit configured to determine whether or not an execution command is sent to any one of said information collection means, said first information processing means, said first information transmission means, said information retrieval means, said

- 15 second information processing means, and said second information transmission means.

51. A computer accessible recording medium, tangibly embodying a program of instructions executable by a central control system included in a remote control system to perform a method step for controlling a plurality of apparatuses divided in a predetermined number of groups, including at least an image forming apparatus, based  
20 on information received by said central control system from said plurality of apparatuses, said central control system being included in a remote control system, said step comprising:

collecting by an information collection unit said information related to pre-maintenance and to expendable supplies and material by information collection means

from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control system from any one of said plurality of apparatuses.

- 5            52. The computer accessible recording medium according to claim 51, further comprising the steps of:

processing by information processing means said information which is acquired by any means of being received from said plurality of apparatuses and being collected by said information collection means;

- 10           transmissively connecting to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, by an information transmission means; and

transmitting said information processed by said information processing means.

- 15           53. The computer accessible recording medium according to claim 51, further comprising the step of:

setting in advance said information, for which said collection process by said information collection means is allowed.

- 20           54. The computer accessible recording medium according to claim 51, further comprising the step of:

setting a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups

55. A computer accessible recording medium, tangibly embodying a program of instructions executable by a central control system included in a remote control system to perform method steps for controlling a plurality of apparatuses divided in a

predetermined number of groups, including at least an image forming apparatus, based on information received by said central control system from said plurality of apparatuses, said central control system being included in a remote control system, said steps comprising:

- 5           accumulating said information, in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled; and

- retrieving, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one  
10   from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control system from any one of said plurality of apparatuses.

56. The computer accessible recording medium according to claim 55, further comprising the steps of:

- 15           processing by information processing means said information which is acquired by any means of being received from said plurality of apparatuses and being retrieved by information retrieval means;

- transmissively connecting to terminal units provided by a plurality of service centers so as to control said plurality of image forming apparatuses, by information  
20   transmission means; and

          transmitting said information processed by said information processing means.

57. The computer accessible recording medium according to claim 55, further comprising the step of:

          setting in advance said information, for which said retrieval process by said



information retrieval means is allowed.

58. The computer accessible recording medium according to claim 55, further comprising the step of:

setting a group in advance by dividing said plurality of image forming

5 apparatuses into a predetermined number of groups.

59. The computer accessible recording medium according to claim 52, further comprising the step of:

performing alteration and addition onto said information processed by said information processing means.

10 60. The computer accessible recording medium according to claim 52, further comprising the step of:

setting a destination of information transmission performed by said information transmission means.

15 61. The computer accessible recording medium according to claim 52, further comprising the step of:

outputting said information processed by said information processing means through the means of at least one of, image formation on a display device, data recording on a paper sheet or audible voice.

20 62. The computer accessible recording medium according to claim 52, further comprising the step of:

transmitting said information processed by said information processing means, in case when a request for acquiring said processed information is received from any one of the terminal units.

63. The computer accessible recording medium according to claim 56, further

comprising the step of:

performing alteration and addition onto said information processed by said information processing means.

64. The computer accessible recording medium according to claim 56, further comprising the step of:

setting a destination of information transmission performed by said information transmission means.

65. The computer accessible recording medium according to claim 56, further comprising the step of:

- 10 outputting said information processed by said information processing means through the means of at least one of, image formation on a display device, recording data on a paper sheet, or audible voice.

66. The computer accessible recording medium according to claim 56, further comprising the step of:

- 15 transmitting said information processed by said information processing means, in case when a request for acquiring said processed information is received from any one of the terminal units.

67. A computer accessible recording medium, tangibly embodying a program of instructions executable by a central control system included in a remote control system to perform method steps for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus, based on information received by said central control system from said plurality of apparatuses, said central control system being included in a remote control system, said steps comprising:
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collecting, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said

- 5 central control system from any one of said plurality of apparatuses to be remotely controlled, by information collecting means;

processing said information received from any one of said plurality of apparatuses by first information processing means;

- transmissively connecting to respective terminal units provided by a plurality  
10 of service centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said first information processing means;

accumulating information, in the case where said information is received from any one of said plurality of apparatuses to be remotely controlled, said information

- 15 being transmitted by first information transmitting means;

retrieving, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses,

- 20 said information being retrieved by information retrieving means;

processing said information by second information processing means, said information received from any one of said plurality of apparatuses and retrieved by said information retrieval means;

transmissively connecting to terminal units provided by a plurality of service

centers so as to control said plurality of image forming apparatuses, and subsequently transmitting said information processed by said second information transmission means; and

determining whether any one said information collection means, said first  
5 information processing means, said first information transmission means, said information retrieval means, said second information processing means, and said second information transmission means, is allowed.

68. A remote control means for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus,  
10 comprising:

central control means comprising at least computer means for receiving information from said plurality of apparatuses and for remotely controlling said plurality of apparatuses based on said information; and

information collection means for collecting, based on said information  
15 presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control system from any one of said plurality of apparatuses to be remotely controlled.

69. The remote control means according to claim 68, further comprising:  
20 information processing means for processing said information which is acquired by any means of being received from said plurality of apparatuses and being collected by said information collection means; and

information transmission means for transmissively connecting to terminal units provided by a plurality of service centers so as to control said plurality of image

forming apparatuses and subsequently transmitting said information processed by said information processing means;

70. The remote control means according to claim 68, further comprising:  
means for setting in advance said information, for which said collection  
5 process by said information collection means is allowed.

71. The remote control means according to claim 68, wherein said information collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection means is related to pre-maintenance.

72. The remote control means according to claim 68, wherein said information  
10 collected, from all of said plurality of apparatuses to be remotely controlled, by said information collection means is related to expendable supplies and material.

73. The remote control means according to claim 68, further comprising:  
group setting means for setting a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

15 74. The remote control means according to claim 69, further comprising:  
means for performing alteration and addition onto said information processed by said information processing means.

75. The remote control means according to claim 69, further comprising:  
means for setting a destination of information transmission performed by said  
20 information transmission means.

76. The remote control means according to claim 69, further comprising:  
means for outputting said information processed by said information processing means through the means of at least one of, image formation on a display device, data recording on a paper sheet, or audible voice.

77. The remote control means according to claim 69, further comprising:

means for transmitting said information processed by said information processing means, in case when a request for acquiring said processed information is received from any one of the terminal units.

5 78. A remote control means for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus, comprising:

central control means comprising at least computer means for receiving information from said plurality of apparatuses and for remotely controlling said

10 plurality of apparatuses based on said information;

information accumulation means for accumulating information, in case when said information is received by said central control means from any one of said plurality of apparatuses to be remotely controlled; and

information retrieval means for retrieving, based on said information presently  
15 received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case when said information is received by said central control means from any one of said plurality of apparatuses.

79. The remote control means according to claim 78, further comprising:

20 information processing means for processing said information which is acquired by any means of being received from said plurality of apparatuses and being retrieved by said information retrieval means; and

information transmission means for transmissively connect to terminal means provided by a plurality of service centers so as to control said plurality of image

forming apparatuses and subsequently transmitting said information processed by said information processing means.

80. The remote control means according to claim 78, further comprising:  
means for setting in advance said information, for which said retrieval process  
5 by said information retrieval means is allowed.

81. The remote control means according to claim 78, wherein said information which is acquired by any means of being received from said plurality of apparatuses and being retrieved by said information retrieval means is related to pre-maintenance.

- 10 82. The remote control means according to claim 78, wherein said information acquired from all of said plurality of apparatuses to be remotely controlled by said information accumulation means is related to expendable supplies and material.

83. The remote control means according to claim 78, further comprising:  
group setting means for setting a group in advance by dividing said plurality of  
15 image forming apparatuses into a predetermined number of groups.

84. The remote control means according to claim 83, further comprising:  
a plurality of communication adapters means connected to said plurality of image forming apparatuses for communicating with said central control means,  
wherein said group setting means divides said plurality of image forming  
20 apparatuses into a number of groups each assigned to said communication adapters means.

85. The remote control means according to claim 83, further comprising:  
a plurality of communication adapters means connected to said plurality of image forming apparatuses for communicating with said central control means,

wherein said group setting means divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of said respective communication adapters means.

- 5 86. The remote control means according to claim 83, wherein said plurality of image forming apparatuses are interconnected by way of communication network means incorporating network control means, and

wherein said group setting means divides said plurality of image forming apparatuses into a number of groups each assigned to an IP address in said communication network means.

- 10 87. The remote control means according to claim 83, wherein said plurality of image forming apparatuses are interconnected by way of communication network means incorporating network control means, and wherein said group setting means divides said plurality of image forming apparatuses into a number of groups each assigned to a predetermined number of IP  
15 addresses in said communication network means.

88. The remote control means according to claim 79, further comprising: means for performing alteration and addition onto said information processed by said information processing means.

- 20 89. The remote control means according to claim 79, further comprising: means for setting a destination of information transmission performed by said information transmission means.

90. The remote control means according to claim 79, further comprising: means for outputting said information processed by said information processing means through the means of at least one of, image formation on a display



device, data recording on a paper sheet or audible voice.

91. The remote control means according to claim 79, further comprising:

means for transmitting said information processed by said information

processing means, in case where a request for acquiring said processed information is

5 received from any one of the terminal units.

92. A remote control means for controlling a plurality of apparatuses divided

into a predetermined number of groups, including at least an image forming apparatus,

comprising:

central control means comprising at least computer means for receiving

10 information from said plurality of apparatuses and for remotely controlling said

plurality of apparatuses based on said information;

information collection means for collecting, based on said information

presently received, related information from all of said plurality of apparatuses included

in all the groups other than the one from which said information is originally

15 transmitted, in case when said information is received by said central control means

from any one of said plurality of apparatuses to be remotely controlled;

first information processing means for processing said information received

from any one of said plurality of apparatuses;

first information transmission means for transmissively connecting to terminal

20 means provided by a plurality of service centers so as to control said plurality of image

forming apparatuses and subsequently transmitting said information processed by said  
information processing means;

information accumulation means for accumulating information, in case when

said information is received from any one of said plurality of apparatuses to be remotely

controlled;

information retrieval means for retrieving, based on said information presently received, related information from all of said plurality of apparatuses included in all the groups other than the one from which said information is originally transmitted, in case

- 5 when said information is received by said central control means from any one of said plurality of apparatuses;

second information processing means for processing said information received from any one of said plurality of apparatuses and retrieved by said information retrieval means;

- 10 second information transmission means for transmissively connecting to the terminal means so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said information processing means; and

- means for determining whether or not an execution command is sent to any one  
15 of processing steps, said information collection means, said first information processing means, said first information transmission means, said information retrieval means, said second information processing means, and said second information transmission means.

93. A central control means for controlling a plurality of apparatuses divided into a predetermined number of groups, including at least an image forming apparatus,  
20 based on information received by said central control means from said plurality of apparatuses, said central control means being included in remote control means, comprising:

information collection means for collecting, based on said information presently received, related information from all of said plurality of apparatuses included

in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control means from any one of said plurality of apparatuses to be remotely controlled.

5           94. The central control means according to claim 93, further comprising:

information processing means for processing said information which is acquired by any means of being received from said plurality of apparatuses and being collected by said information collection means;

10           information transmission means for transmissively connecting to terminal means provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said information processing means;

15           95. The central control means according to claim 93, further comprising:  
means for setting in advance said information, for which said collection process by said information collection means is allowed.

96. The central control means according to claim 93, further comprising:  
group setting means for setting a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

20           97. The central control means according to claim 94, further comprising:  
means for performing alteration and addition onto said information processed by said information processing means.

98. The central control means according to claim 94, further comprising:  
means for setting a destination of information transmission performed by said information transmission means.

99. The central control means according to claim 94, further comprising:  
means for outputting said information processed by said information  
processing means through the means of at least one of, image formation on a display  
device, recording data on a paper sheet or audible voice.

5        100. The central control means according to claim 94, further comprising:  
means for transmitting said information processed by said information  
processing means, in case when a request for acquiring said processed information is  
received from any one of the terminal means.

10       101. The central control means according to claim 94, further comprising:  
means for outputting said information processed by said information  
processing means through the means of at least one of, image formation on a display  
device, recording data on a paper sheet or audible voice.

15       102. A central control means for controlling a plurality of apparatuses divided  
into a predetermined number of groups, including at least an image forming apparatus,  
based on information received by said central control means from said plurality of  
apparatuses, said central control means being included in remote control means,  
comprising:

20       information accumulation means for accumulating information, in case when  
said information is received by said central control means from any one of said plurality  
of apparatuses to be remotely controlled; and

information retrieval means for retrieving, based on said information presently  
received, related information from all of said plurality of apparatuses included in all the  
groups other than the one from which said information is originally transmitted, in case  
when said information related to pre-maintenance and to expendable supplies and

material is received by said central control means from any one of said plurality of apparatuses.

103. The central control means according to claim 102, further comprising:

information processing means for processing said information which is

5 acquired by any means of being received from said plurality of apparatuses and being retrieved by said information retrieval means; and

information transmission means for transmissively connecting to terminal means provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmitting said information processed by said

10 information processing means;

104. The central control means according to claim 102, further comprising:

means for setting in advance said information, for which said retrieval process by said information retrieval means is allowed.

105. The central control means according to claim 102, further comprising:

15 group setting means for setting a group in advance by dividing said plurality of image forming apparatuses into a predetermined number of groups.

106. The central control means according to claim 103, further comprising:

means for performing alteration and addition onto said information processed by said information processing means.

20 107. The central control means according to claim 103, further comprising:

means for setting a destination of information transmission performed by said information transmission means.

108. The central control means according to claim 103, further comprising:

means for transmitting said information processed by said information

processing means, in case when a request for acquiring said processed information is received from any one of the terminal means.

109. A central control means for controlling a plurality of apparatuses divided in a predetermined number of groups, including at least an image forming apparatus,
- 5 based on information received by said central control means from said plurality of apparatuses, said central control means being included in remote control means, comprising:

- information collection means for collecting, based on said information presently received, related information from all of said plurality of apparatuses included
- 10 in all the groups other than the one from which said information is originally transmitted, in case when said information related to pre-maintenance and to expendable supplies and material is received by said central control means from any one of said plurality of apparatuses to be remotely controlled;

- first information processing means for processing said information received
- 15 from any one of said plurality of apparatuses;

first information transmission means for transmissively connecting to terminal means provided by a plurality of service centers so as to control said plurality of image forming apparatuses and subsequently transmit said information processed by said information processing means;

- 20 information accumulation means for accumulating information, in case when said information is received from any one of said plurality of apparatuses to be remotely controlled;

information retrieval means for retrieving, based on said information presently received, related information from all of said plurality of apparatuses included in all the

groups other than the one from which said information is originally transmitted, in case when said information is received by said central control means from any one of said plurality of apparatuses;

second information processing means for processing said information received  
5 from any one of said plurality of apparatuses and retrieved by said information retrieval means;

second information transmission means for transmissively connecting to the terminal means so as to control said plurality of image forming apparatuses and subsequently transmit said information processed by said information processing  
10 means; and

means for determining whether or not an execution command is sent to any one of processing steps, said information collection means, said first information processing means, said first information transmission means, said information retrieval means, said second information processing means, and said second information transmission means.

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